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(56) Documents Cited

GB 2074717 A

GB 1257443 A

GB 1085001 A

EP 0709631 A

US 5271241 A

US 4941901 A

(58) Field of Search

UK CL (Edition R) F4H H8

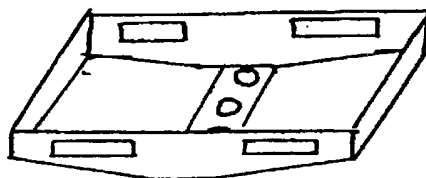
INT CL⁷ F24F 13/22 , F25D 21/14

(54) Abstract Title

Condensate drip tray

(57) A condensate drip tray has holes in the main body of the tray to allow the tray to slide easily into position without the need for any further fixings. It has three possible drain points and a sloping floor causing collected water to drain by gravity to the drain points. The condensate drip tray is for use with air condensing units and can be used with most manufacturers air conditioning units without further modification. The drain points are in the form of knockouts.

FIG 4



OVERALL 3D VIEW

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FIG 1

CONDENSER DRIP TRAY

PLAN VIEW

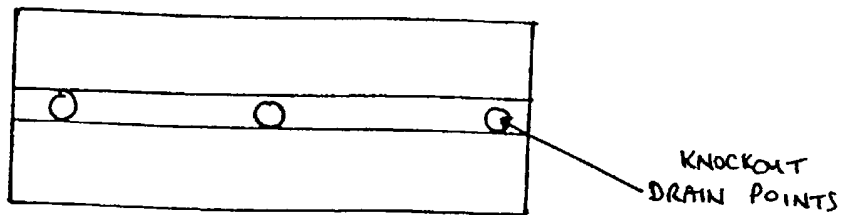


FIG 2.

FRONT VIEW

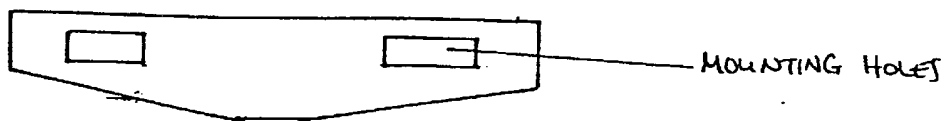
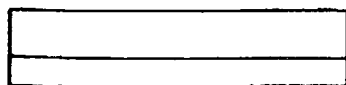


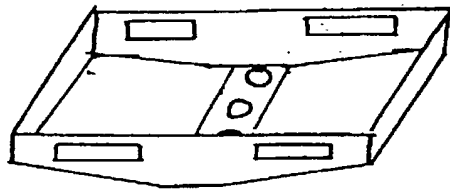
FIG 3

SIDE VIEW



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FIG 4.



OVERALL 3D VIEW

Condenser Drip Tray - Description.

This invention relates a condenser drip tray.

Condensers are the outdoor units of air conditioning systems. When the air conditioning system switches to defrost or runs in heat pump mode the outdoor condenser drips water. Approximately half of condensers are mounted outside on wall brackets. The water dripping from these units causes inconvenience, damage to property and in winter can form ice on the ground below the condenser giving rise to health and safety risks. The condenser drip tray collects all of this dripping water and channels it to a suitable drain point connection.

The essential features of the invention are the sizing and spacing of the mounting holes, the sloping bottom of the tray and the three drain points. The mounting holes allow the condenser drip tray to be very simply slid into position without the need for any further fixing. The wall brackets used to install condenser units are a common size but the spacing of the legs of the wall brackets (i.e. the centres between legs) varies from one manufacturer to another. The sizing and spacing of the mounting holes means that this invention can be used with most manufacturers condensers without further modification. The sloping bottom of the invention causes all collected water to be moved to the drain points. These drain points are in the form of knockouts. They are sized to fit standard commercially available overflow pipe and are positioned to allow the installation engineer to select the point from which the water will be drained. As these drains are routed on the outside walls of buildings this may be an important aesthetic consideration.

The attached drawing shows a plan, front, end and overall view of the invention. The plan view shows the position of possible drain points. The front view shows the mounting holes and the side view shows the extent of the sloping bottom of the tray.

Condenser Drip Tray

Claims

My condenser drip tray is uniquely mounted below air conditioning condenser units making installation easy.

The sizing and spacing of the mounting holes allows the condenser drip tray to be used with most manufacturers air conditioning condenser units without further modification.

The condenser drip tray allows selection of any of three possible drain connection points.

The condenser drip tray causes water to flow towards the drain points thus avoiding all the problems of stagnant collected water

The condenser drip tray collects water and distributes it to a drain point without any mechanical assistance.



Application No: GB 9926287.5
Claims searched: All

Examiner: M C Monk
Date of search: 9 May 2000

Patents Act 1977 Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.R): F4H (H8)

Int Cl (Ed.7): F24F (13/22); F25D (21/14)

Other:

Documents considered to be relevant:

| Category | Identity of document and relevant passage | Relevant to claims |
|----------|---|--------------------|
| X | GB 2074717 A TOKYO SHIBAURA DENKI KK Drain tray (48) is mounted at the base of the airconditioning unit and includes access to a drain tube (52). | All |
| X | GB 1257443 ULGOR SCI Drip tray has outlet pipe (2). | All |
| X | GB 1085001 LICENTIA PATENT VERWALTUNGS Drip tray (1) has drain outlet (5). | All |
| X | US 5271241 SAMSUNG ELECTRONICS Tray (300) has a slanted bottom plate (310) with openings (320). | All |
| X | US 4941901 U S NATURAL RESOURCES Clip on drainage tray attachable to a hose. | All |
| X | EP 0709631 A1 BOSCH-SIEMENS See embodiment shown in Fig.1. See EPODOC & WPI abstracts. | All |

X Document indicating lack of novelty or inventive step
Y Document indicating lack of inventive step if combined with one or more other documents of same category.

& Member of the same patent family

A Document indicating technological background and/or state of the art.
P Document published on or after the declared priority date but before the filing date of this invention.
E Patent document published on or after, but with priority date earlier than, the filing date of this application.